

50103-431/SEA 3088

IN-LINE, PASS-BY SYSTEM AND
METHOD FOR DISC VAPOR
LUBRICATION

ABSTRACT OF THE DISCLOSURE

An apparatus for performing simultaneous pass-by vapor deposition of a uniform thickness thin film of a lubricant on at least one surface of each of a plurality of substrates, comprising:

- (a) chamber means having an interior space adapted to be maintained at a reduced pressure below atmospheric pressure, including entrance and exit means at opposite ends thereof;
- (b) at least one linearly extending vapor source means for supplying the interior space of the chamber with at least one linearly extending stream of lubricant vapor;
- 10 (c) a substrate/workpiece mounting/supporting means adapted for supporting thereon a plurality of substrates/workpieces; and
- (d) a transporter/conveyor means for continuously moving the substrate/workpiece mounting/supporting means transversely past the at least one linearly extending stream of lubricant vapor for depositing a uniform thickness
- 15 thin film of lubricant on the surfaces of each of a plurality of substrates/workpieces carried by the substrate/workpiece mounting/supporting means.

Embodiments of the method of the invention include depositing lubricant thin films on freshly deposited carbon-containing protective overcoats formed on disc-shaped magnetic and/or magneto-optical recording media.